

BUILDING YOUR OWN GARAGE

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Beware of Imitations

In a recent opinion, the U. S. Appellate Court enjoined imitators from using the word "Rubberoid or any similar name as the trade name or brand" of their roofing. There is no *rubber* in the composition or in the pronunciation of RU-BER-OID—always spelled with one "B" and pronounced RU, as in Ruby.

Get the *Real* RU-BER-OID

BUILDING YOUR OWN GARAGE

RU-BER-OID has been recognized as a roofing of the highest grade for a quarter of a century. The experience of thousands of users proves that it is a gilt-edged investment.

It is seldom practicable for the city man of moderate means to erect a garage in conjunction with his residence. Usually there is lack of space or no way of gaining an entrance to the space. In lieu thereof the owner of an automobile patronizes the nearest public garage which is probably close to his home and where he may have every facility at a nominal charge.

In suburban sections, and in small towns where the dwellings are surrounded by plots of ground, the conditions are quite the reverse. The public garage is usually located on the main street in the heart of the town, perhaps a considerable walk from one's home. This makes going to and from the car a serious inconvenience, particularly in bad weather. Moreover, the majority of men who live in the country and drive their own cars are men who derive a certain amount of pleasure from making their own repairs and overhauling the mechanism from time to time, in which case the garage should be as convenient as possible. The small private garage, therefore, has come to be regarded as quite a necessary adjunct to the home.

Planning and building a small garage is so simple that the services of an architect or expert authority are not necessary. After all, with the exception of the roof which gives the garage its real character, the building proper is little more than a large box in design; hence the matter practically resolves itself into a choice of materials that will conform to one's individual taste and harmonize with a given surrounding. This book is written with the idea of suggesting the essential features. It contains plans which are not alone simple in their principles, from which the layman can easily construct his own garage, but they are of such a character as to lend themselves admirably to almost any local conditions.

A site for the garage should be selected so that it does not appear too close to the dwelling, and thus detract from the appearance of both buildings. Keep it as far removed from the house as

Railroads use RU-BER-OID as a covering for locomotive cabs. This proves conclusively and in a striking way the ability of RU-BER-OID to withstand successfully all extremes of wind and weather.

your convenience and plot of ground will permit. Preferably set it among trees or shrubbery so that the structure blends with the landscape rather than intrudes upon it.

If the only available site is near another garage on an adjoining property, as is frequently the case in suburban sections, model the contemplated building to harmonize with the architectural treatment of the neighboring garage. It may seem like lack of originality for a man to design his house or garage to harmonize with that of his neighbor's; but it is, nevertheless, a fact that if the architect or owner would only curb his desire for a display of individuality and consider the natural and artificial limitations of the particular spot to be improved, our suburban towns would not present the grotesque appearance they sometimes do.

While the minor details essential to efficiency differ in individual cases, there are certain basic principles which should be observed as far as possible in all garage designs. Briefly, they may be summarized as follows: First, adequate storage space for the automobile and its accessories; second, fire-proofness—either absolute fire protection or slow-burning construction; and third, a convenient arrangement of the various utilities—doors, light, heat and facilities for cleaning.

It is possible to design a structure which shall be absolutely fire-proof, but such a building almost always involves one of two disadvantages—unsightliness or unwarranted expense. For example, steel, sectional garages—those which are built with the idea of being portable—are usually non-combustible buildings, but they are very unattractive. On the other hand, to erect a concrete garage which has some claim to architectural beauty with a fire-proof roof and fittings and made to present a good-looking exterior, is likely to tax the purse of the man in moderate circumstances.

The principal cause of fire within a garage is leaking gasoline; hence if the floor is so planned that all waste gasoline is drained immediately, the risk is greatly minimized. For safety and for con-

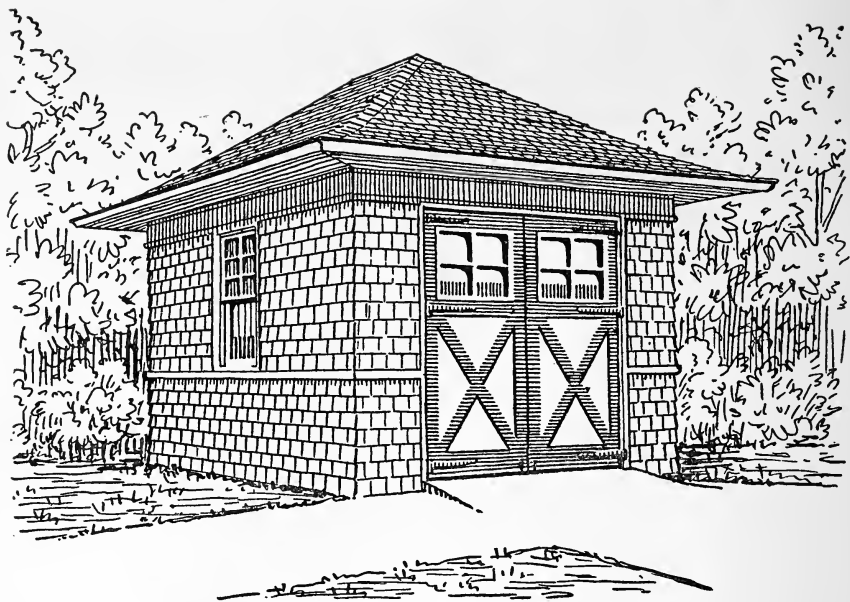
The real RU-BER-OID is made by the Standard Paint Company. Avoid inferior substitutes. Look for the "RU-BER-OID Man" on every roll.

venience the floor of a garage should be of concrete, surfaced with a finishing coat of cement and made impervious to water and oil.

Cinder concrete is the cheapest and will answer the purpose very nicely. Use a mixture consisting of 1 part Portland cement of a grade that is guaranteed to meet the United States Government standard, 3 parts clean, sharp sand and 5 parts cinders. The cinders should be hard, vitreous clinkers, free from unburned coal and ashes. The finishing coat of cement, in the proportion of 1 part cement to 2 parts clean, sharp sand, and mixed with water containing IMPERVITE WATERPROOFING COMPOUND may be applied directly over the concrete while it is green, or later when the building is entirely completed. It should be one-inch thick, pitched to drain to an outlet in the centre of the floor if possible, and the edges should be brought up to the base of the side walls with a sanitary cove as shown in diagram on Page 5. Flushing the garage with water for purposes of cleaning will be greatly facilitated in this way, with small chance for dirt and grease to collect in the corners. Thus will be eliminated one source of unpleasant odors and frequently the origin of fires.

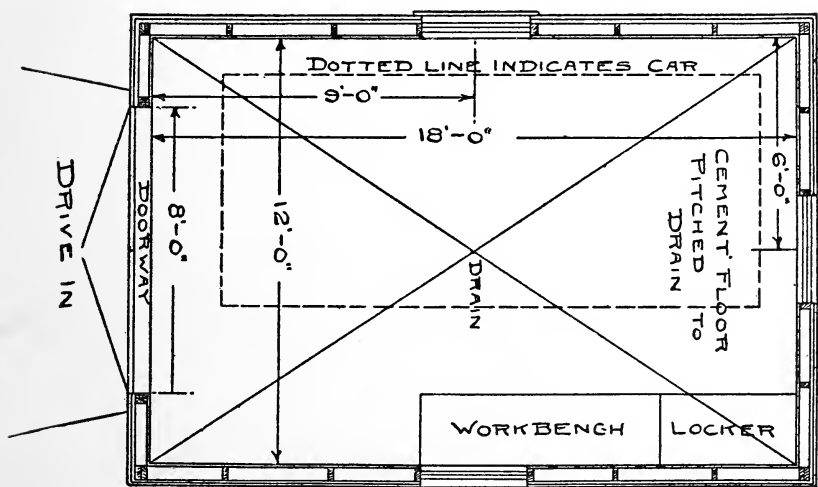
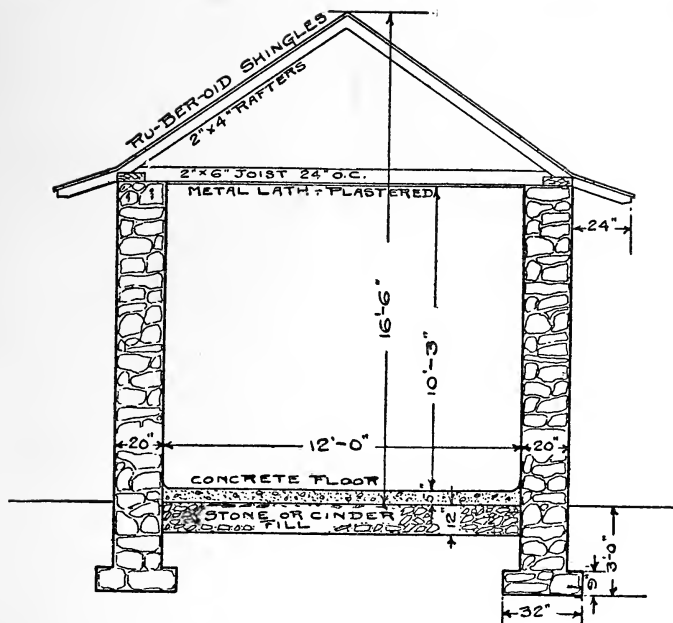
Among the inexperienced, there is a tendency to use too much cement in the finishing coat in an effort to obtain a dense waterproof texture. Yet it is well to remember that a mortar too rich in cement is apt to "check," and thus ruin the appearance of the surface. Instead, use IMPERVITE WATERPROOFING COMPOUND, which is endorsed by the foremost architects and builders for just such purposes. IMPERVITE waterproofs under the strongest kind of a guarantee. Later, after the floor has set up hard and dried out, to enhance its appearance, it may be painted with one coat of IMP CEMENT FLOOR FILLER, followed by a coat of IMP CEMENT FLOOR FINISH, which latter is manufactured in a number of attractive colors by the STANDARD PAINT COMPANY. This treatment will render the floor completely non-absorbent and grease-proof, and at the same time make a very attractive looking floor. Special literature on the subject may be had upon request.

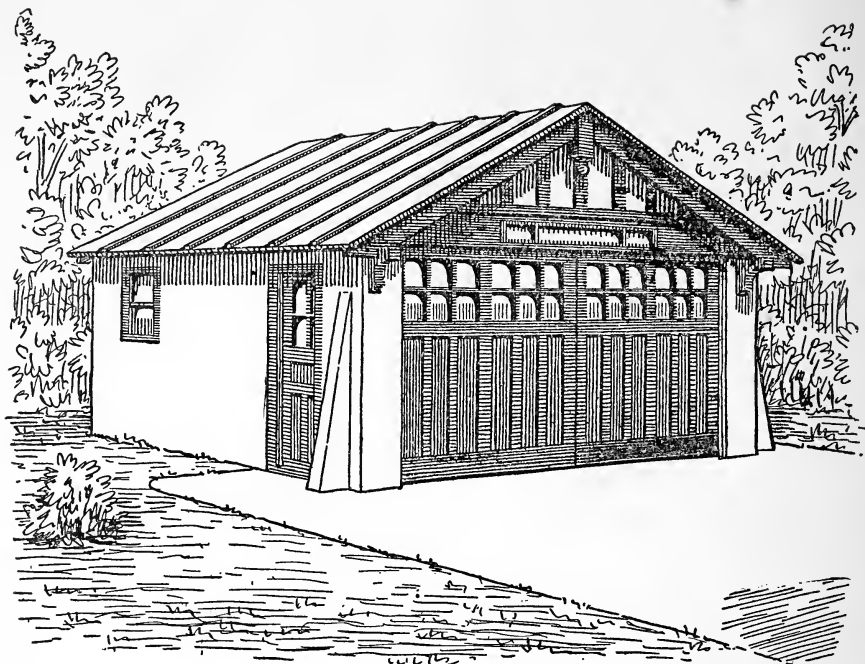
Assuming that we are to erect a two-car garage, let us first consider the dimensions of the floor. A large touring car requires



The illustration shown above (plans on page 5) is a splendid example of the small garage which is designed for one car of moderate proportions. The dimensions, 12 feet x 18 feet, allow sufficient space for a work bench, locker, wash-stand and pump, and an aisle two feet wide around the machine. It is of extremely simple architecture yet well-proportioned and attractive. The walls and roof are framed with wood, made fire-resisting on the inside by metal lath and cement plaster and including a metal lath ceiling. The exterior is rendered practically fire-proof by the use of RU-BER-OID SHINGLES which are laid over rough sheathing boards on the walls, to make the structure perfectly rigid, and over shingle lath on the roof. The floor is of concrete, and its finishing coat of cement saturated with IMPERVITE WATERPROOFING COMPOUND is brought up to the wall plaster with a sanitary cove. This garage should be built complete for \$325.

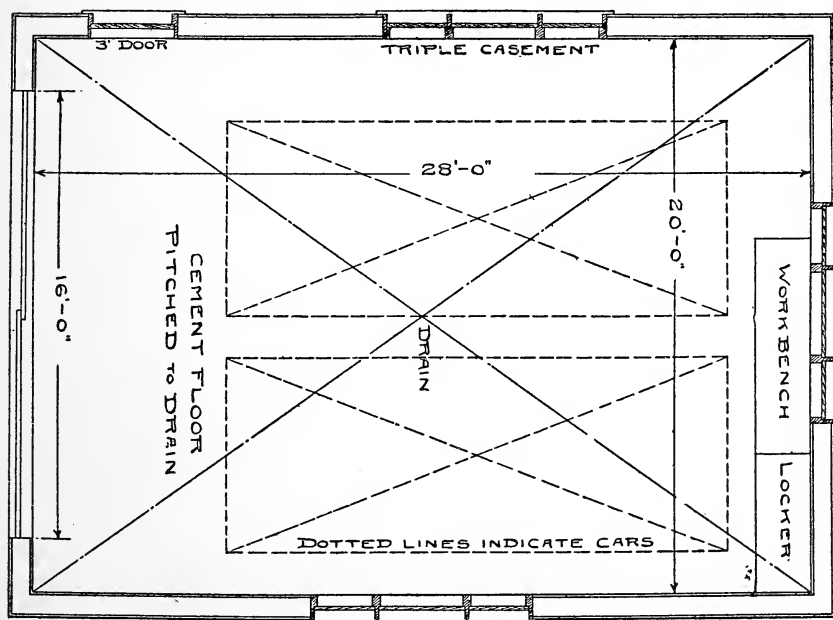
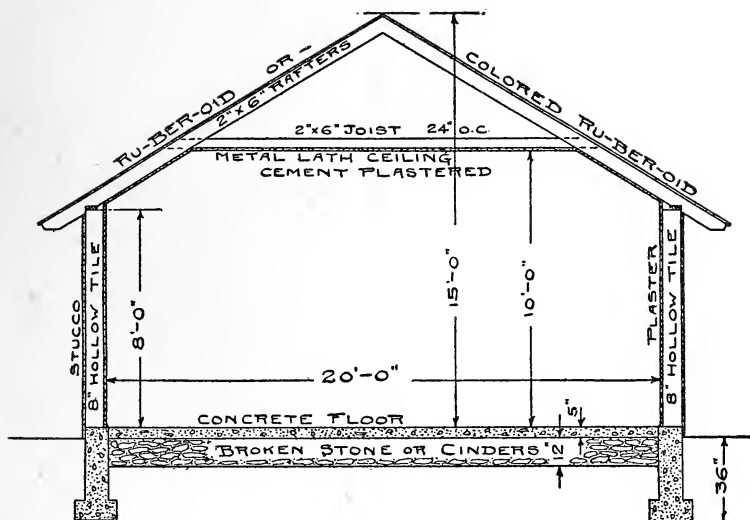
a space of about 7 x 18 feet, and in addition to this area room for a passageway not less than two feet wide should be provided all around it permitting access to every part. This is very essential, especially when the owner looks after his own car. Unless a separate room is contemplated as a work-shop, sufficient space should be added to the actual storage room for an adequate work-bench with shelves beneath, lockers for the storage of robes, tires, duplicate parts and other sundries and a gasoline pump. Hence it will be seen that a width of 20 feet is advisable with a length of from 28 to 30 feet.

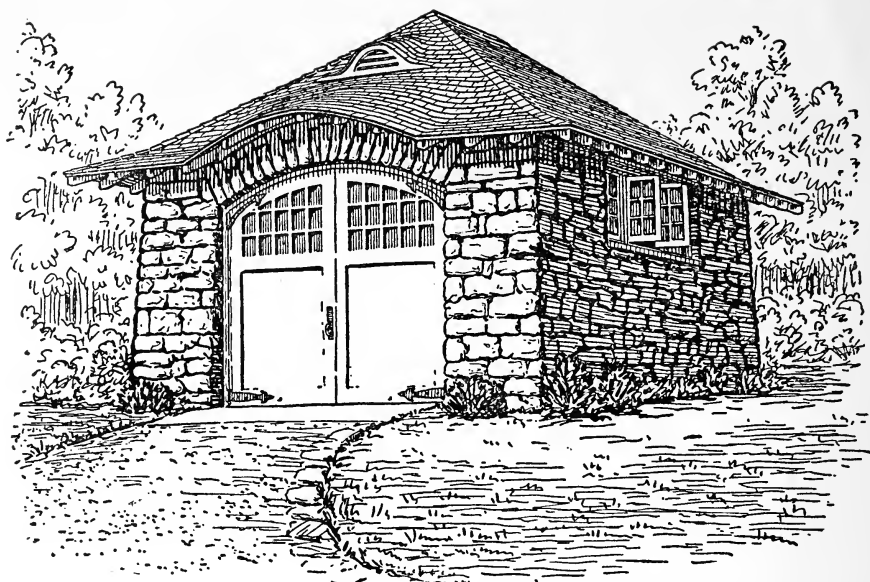




The illustration above (plans on page 7) shows a garage suitable for storing two cars, and is constructed of terra cotta hollow tile plastered inside and out with cement stucco. The roof is frame, protected from fire on the outside by RU-BER-OID Roofing, and safeguarded within by a metal lath and cement plaster ceiling. Thus, this building may be said to be equivalent to an absolutely fireproof structure. The front has a large opening closed by two sliding doors one behind the other so that either side may be opened one at a time. The floor plan and sectional diagram illustrate the general layout and the method of construction which is very simple. The cost of this garage should not exceed \$625.

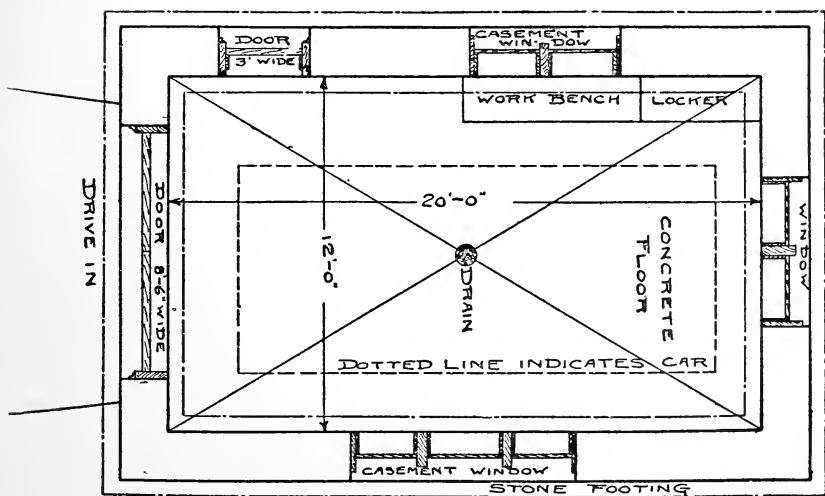
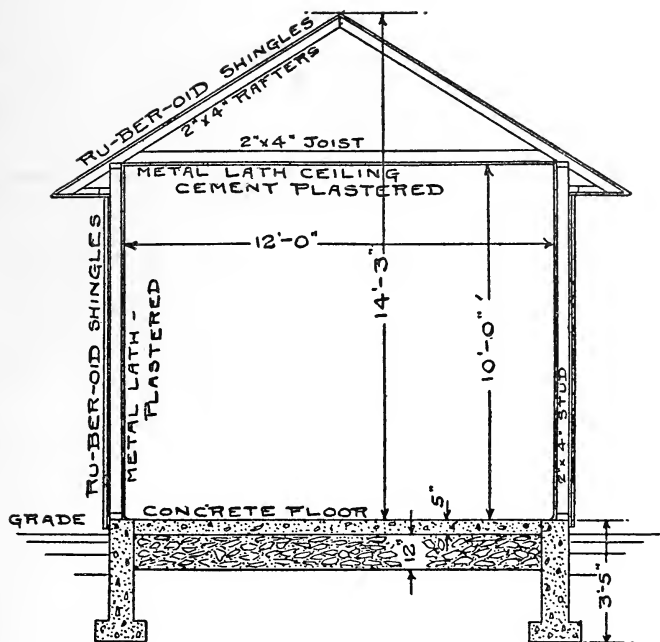
To insure the greatest service from an automobile, it should receive careful attention. Not only must it be cleaned frequently but it must be overhauled at regular intervals. To do this thoroughly and with some degree of comfort, there must be room to get about, with the light so arranged that it will facilitate every operation. This means that there should be ample windows, their sills sufficiently low to permit the light to reach under and into the car with the minimum amount of shadow. It is a great lack of foresight and very poor economy to stint on window openings and then be obliged to burn electric lights to perform routine work.





The illustration above (plans on page 9) shows an attractive type of rough stone garage for a single car. This is given individuality by the graceful contour of the roof and the eye-brow dormer or ventilator. The doors are of generous proportions, painted white and swung on heavy wrought-iron hinges, and with windows in the upper portions. The roof is of frame construction covered with RU-BER-OLD SHINGLES, and on the under side is hung a ceiling of metal lath and cement plaster. Both roof and ceiling are retardent to fire, thus insuring a structure that is virtually fireproof. The cost of this garage as shown in the drawing and floor plan should not exceed \$500, including all labor and materials. And if the stone is available on the premises ready to lay up in the walls the estimated cost may be reduced to \$400.

The main door should be 9 feet high in the clear, which will permit the entrance of a car having its top up, or a limousine carrying a trunk on top, with due allowance for the car tilting upward as it passes over the threshold and down an inclined drive-in. A door 8 feet wide is sufficient for the single car garage, whereas about 10 feet are required for the two-car building in order that the second car may enter when the first car is in place. The jambs should be fitted with appropriate guards to prevent the wheel hubs from striking through poor steering. A small door, either separate from the large door or built into one of them, will be found very convenient to conserve the heat in the building in cold or inclement weather.



Only the highest grade raw materials are used to make RU-BER-OID—and the standard never varies. This is one of the reasons why RU-BER-OID wears longer than other roofing.

As previously suggested, the design of the garage should correspond to the style of the dwelling as far as practical. Or, if the garage is located some distance from the house and comes in closer relation to an adjoining building, it would probably be better to disregard the dwelling, except for some dominating feature such as the character of the roof. Then make the new garage harmonize in a general way with the nearest neighbor. Further than this, the architectural treatment may be left to one's individual taste, and there is a wide field from which to select.

The roof of a garage is its important feature. Especially is this true of a small garage where it affords the only chance for relieving the severity of a box-like structure. The roof must be given character, not alone in shape but in the materials selected for its covering. We have shown that it is not imperative to have an absolutely fire-proof structure, but rather one that is technically known as "slow burning."

Of the three types of garages illustrated in this book, those having masonry and hollow tile walls and cement floors are virtually fire-proof, inasmuch as their frame roofs while in themselves combustible should be protected from flames within by a ceiling of metal lath and cement plaster. The under side of the roof and the interior of the walls in a frame garage should be safeguarded in a similar way. Thus, in preparing these plans, we have taken full precautionary measures against a conflagration from within the building, and have reduced the element of risk to a minimum.

The possibility of fire starting on the outside from flying sparks or a conflagration in a nearby structure, is equally well provided against by covering the frame roofs with a fire-resisting material—RU-BER-OID ROOFING or RU-BER-OID SHINGLES. Both of these are fire-resisting.

Rough slates and Spanish tiles are effective for roofs of large buildings, but they both demand the heaviest and most expensive kind of construction together with the most skilled labor. They cannot be considered by the man of small means. Furthermore, they

are rather pretentious and would not be appropriate except in certain sections where the surrounding buildings would be in keeping.

No forms of roofing have caused more disappointment and vexation than tin and galvanized iron. Both of these rust rapidly and require frequent painting. When the metal is colder outside than within, condensation takes place. Moisture gathers on the under side of the roofing and this moisture starts a rust which very soon develops into leaks. Metal roofs need constant watching and repairing, and when the cost of such repairs is taken into account, tin is almost as expensive as slate and not half so satisfactory. Copper is most durable, but its cost is about five times that of tin, which makes it impractical for the roof of most small garages.

Wooden shingles must be used on roofs of comparatively steep pitch, and never employed on a surface having an angle of less than 30 degrees—a factor which in itself prohibits their use on many garages whose roofs are of the low, spreading type. In view of these conditions, manufacturers and builders have been led to a serious consideration of other materials for roofing purposes—those that are fire-resisting and at the same time offer durability, economy in erection and a minimum of depreciation and maintenance charges.

As a logical result RU-BER-OID ROOFING has come into prominence, embodying as it does all the virtues of wood shingles, tin, slate, tile and other roofing materials and eliminating their disadvantages. At the same time, RU-BER-OID contributes additional and very desirable factors of safety and economy—the most potent of which is its fire-resisting qualities.

RU-BER-OID is also a non-conductor of heat and cold. It is capable of withstanding rough usage in any climate. Under the most varying conditions it will not crack, warp or rot, and above everything else lends itself to a wide variety of artistic effects.

RU-BER-OID is the original flexible, smooth-surfaced prepared roofing and was introduced a quarter of a century ago following years of experimental work by the most skilled chemists and specialists in the world. It immediately demonstrated its efficiency and economy, and today the adaptability of RU-BER-OID to any and all roofing purposes is recognized by architects, builders and owners of residences and farm buildings throughout the world.

COLORS RU-BER-OID came later and offers all the enduring qualities of the Gray RU-BER-OID, with the added feature of attractive, permanent, harmonious colors—TILE RED and COPPER GREEN.

RU-BER-OID and COLORED RU-BER-OID are made of a tough, heavy felt fabric saturated and coated with a flexible, waterproof gum containing animal and vegetable substances that cannot deteriorate under the most adverse weather conditions. There is no rubber, wood fibre, paper stock, sand, coal tar or petroleum oils in RU-BER-OID or COLORED RU-BER-OID. RU-BER-OID gum is as water-proof and pliable as new rubber, yet unlike rubber which soon rots when exposed to the elements, RU-BER-OID retains its life and flexibility for a generation.

RU-BER-OID SHINGLES are another adaptation of RU-BER-OID. They are made in TILE RED and SLATE GRAY, 8 x 12 $\frac{3}{4}$ inches, and may be laid exactly the same as wood shingles. They cannot warp, rot or split, and when laid the roof is covered with multiple thicknesses of shingles, with no breaks or weak spots, no seams or irregularities and no visible nails.

SPC SLATE SURFACED ROOFING in roll form is less expensive than RU-BER-OID and is recommended for buildings where the extreme durability of RU-BER-OID is not sought. It has an attractive colored slate surface and comes in two colors, RED and GREEN. These colors are guaranteed to remain absolutely permanent since they are the natural colors of the slate used. The rolls weigh 80 pounds per square of 108 square feet. They are securely packed to withstand freight transportation to any distance, and each roll contains sufficient nails and cement for the laps. There are no deleterious ingredients in the composition of SPC SLATE SURFACED ROOFING. And so it is easily distinguishable from inferior grades of roofing of a similar type.

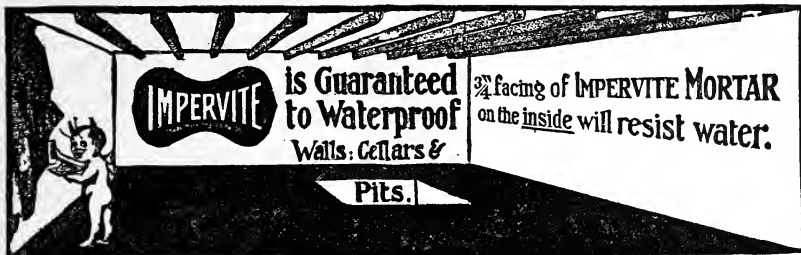
SPC SLATE SURFACED SHINGLES are adapted from the SPC SLATE SURFACED ROOFING and are recommended for those who prefer attractiveness in shingle form rather than in a plain covering. These shingles are also made in RED and GREEN, and not only are they attractive, durable and economical in themselves, but they are fire-resisting. Therefore they save insurance. They hug the roof closely and are practically air-tight, thus making the house warmer in winter with a consequent saving of coal bills. Since they require no painting or other repairs and are virtually indestructible, maintenance charges are practically unknown.

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Cellars, Cisterns, Silos and Walls Made Watertight With Impervite

As a result of comparative tests, the Impervite system of waterproofing was given the Gold Medal (Highest Award) at the California Exposition. It has proven its effectiveness and reliability as a permanent waterproofing compound in Government tests all over the world.

For waterproofing cellars, pits, walls, etc., Impervite is simply dissolved in water and then mixed with cement and sand. This forms a mortar that is absolutely impervious to moisture. Because Impervite mortar sticks to the *inside* of any wall it gives good results in repair work as well as for new work. No matter what water pressure it may be called upon to withstand, an Impervite mortar facing *sticks*.

Silos, rain-beaten brick walls and old stucco houses can be made

watertight and moisture-proof with an Impervite "Wash," applied with a brush. This wash is cheaper than paint and, while not as effective as a $\frac{1}{2}$ " to $\frac{3}{4}$ " facing of Impervite mortar, gives excellent results.

You can make your stucco house absolutely waterproof and at the same time reduce hair-cracking by mixing Impervite with the stucco mortar.

Impervite is a patented asphaltic emulsion. It is a great improvement over the old-fashioned compounds containing calcium stearate and similar ingredients. It comes in a paste form and is made in various colors.

Our free book, "How to Waterproof," contains information that will help you solve *your* problem. Write for it *now*. Special information upon request.

THE STANDARD PAINT COMPANY

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Look for the RU-BER-OID Man

He appears on every roll of the genuine RU-BER-OID. This trade mark is your protection against more than 300 imitations.

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